

Research and Training Center for Indiana's State Highway Commission

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The need for a research and training center was brought to the attention of the Indiana State Highway Commission in the latter part of 1963. Roy Jorgenson and Associates recommended such a center in their management survey report. In 1964 land was acquired, plans were drawn, and construction projects were let. The center was constructed in 1965 and 1966 and staffing was well under way by mid 1966.

Ten acres were purchased in McClure Park, a research park owned by the Purdue Research Foundation. The building is on one level and has 20,000 square feet of floor space. Total cost of the land, building, drives, landscaping and equipment will be about \$600,000.

There will be training programs for highway construction inspectors, materials testing personnel, surveyors and possibly refresher courses for project engineers.

For training purposes, the building has an up-to-date classroom. It is equipped with many modern facilities and will eventually have numerous audio-visual aids. The classroom has tables and chairs for at least 30 individuals.

There will also be a laboratory for teaching slump tests and air content tests on concrete, soil compaction tests and aggregate analyses. Drive-in facilities will make it possible for trucks to bring in adequate supplies of concrete, aggregate, and soils.

In the research section of the building there will be a materials handling room and a physical testing laboratory. Both of these facilities will be well equipped. There will be no 600,000 pound testing machine—there would be little use for it. However, Purdue has one which would be available if needed. We will have an excellent laboratory for soils and aggregate to start with.

There are four other rooms for drafting, tabulating, and computing. The heavy equipment area is at the rear of the building. This area will have a small machine shop, aggregate storage bins, moist room, and storage for equipment such as pick-up trucks, Scouts, roughometer, etc.

Some may wonder how all of this is going to fit in with the Joint Highway Research Project at Purdue now some 30 years old. Be assured, we are not doing away with it. In fact this new addition should enlarge the scope of each. In the past there has been some criticism from the Highway Commission as to just what good was being received from the Joint Highway Research Project. In fact, I made several of those comments myself, and some of the loyal Purdue alumni in the department may have wanted to put me on the job to quiet me. I never attended Purdue or any other institution of higher learning in Indiana. I feel that under this new setup there will be no justification for these complaints.

The Joint Highway Research Project will continue as in the past to do basic research or it may be referred to as research of the "long haired" variety. The research and training center will do applied research. As an illustration, the Joint Highway Research Project has done extensive work on nuclear density testing equipment. Most of the theoretical work has been completed. However, we need to get it out on a contract where there are grading operations in progress to remove any inconsistencies that might still be in the equipment and to see how it is going to work on a job. This will be done this summer.

Another illustration might be the use of television using video tape. The Joint Highway Research Project is giving some consideration to setting up this equipment that we feel has considerable possibilities of being helpful in highway operations. For example, if during a resurfacing program there was a video tape taken of a proposed project, along with a roughometer reading, we would be in a much better position to see the need for the resurfacing. Another application might be to observe the operation of traffic at an intersection. The camera and operator could be put in the bucket of a "cherry picker" to observe the traffic during a certain period. This record would undoubtedly be of great value in trying to improve the operation.

Staffing of the center is now well underway. We are most fortunate to have assigned to us from the Joint Highway Research Project, Professor E. J. Yoder, to act as temporary director. It will be a great help to utilize Professor Yoder's services to get the research and training center started. Also hired as of June 1 were Messrs. Williamson, Evans and Dove as Research Assistants. These men all have at least

M.E. degrees from Purdue in Civil Engineering with majors in the highway field.

The problem in finding a permanent director is caused by the emphasis that has been put on research in the last few years and the large amount of money that has been allocated by Congress for this work. The capable individuals already have good jobs. Researchers are presently in such demand that many individuals with Ph.D. degrees are starting at salaries of about \$15,000 per year.